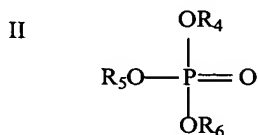
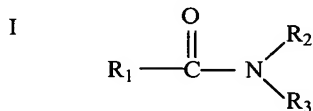


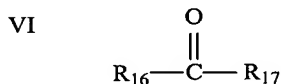
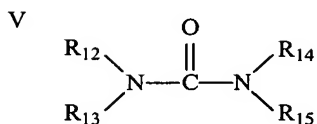
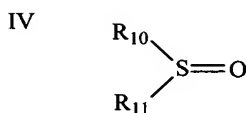
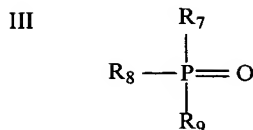
WHAT IS CLAIMED IS:

1. A process for making a direct dispersion of a photographically useful material comprising: mixing (i) an aqueous phase and (ii) a liquid organic phase under conditions of shear or turbulence to form a dispersion of the organic phase dispersed in the aqueous phase; wherein the liquid organic phase comprises one or more photographically useful materials and one or more organic solvents having a boiling point of at least 150°C, a molecular weight less than or equal to 300, and a solvatochromic parameter β value greater than or equal to 0.50, and wherein the weight ratio of the sum of the solvents having a boiling point of at least 150°C, a molecular weight less than or equal to 300, and a solvatochromic parameter β value greater than or equal to 0.50 to the photographically useful materials does not exceed 0.25.

2. The process of claim 1, wherein the one or more organic solvents having a boiling point of at least 150°C, a molecular weight less than or equal to 300, and a solvatochromic parameter β value greater than or equal to 0.50 are selected from amides, anilides, phosphate esters, phosphine oxides, sulfoxides, ureas and ketones.

3. The process of claim 1, wherein the one or more organic solvents having a boiling point of at least 150°C, a molecular weight less than or equal to 300, and a solvatochromic parameter β value greater than or equal to 0.50 are selected from compounds of Formulas I through VI:





wherein R₁ through R₁₇ each independently represent hydrogen or a substituted or unsubstituted alkyl or aryl group.

4. The process of claim 3, wherein the liquid organic phase comprises a combination of organic solvents consisting essentially of one or more primary permanent high-boiling solvents and the one or more solvents having a boiling point of at least 150°C, a molecular weight less than or equal to 300, and a solvatochromic parameter β value greater than or equal to 0.50, where each primary solvent employed in the organic phase mixture of the dispersions has a boiling point of at least 150°C and either (a) a molecular weight of greater than 300, (b) a solvatochromic parameter β value less than 0.50, or (c) a molecular weight of greater than 300 and a solvatochromic parameter β value less than 0.50, and where the weight ratio of the sum of the primary permanent solvents to the sum of the solvents having a boiling point of at least 150°C, a molecular weight less than or equal to 300, and a solvatochromic parameter β value greater than or equal to 0.50 is greater than 1.

5. The process of claim 4, wherein the photographically useful material comprises a dye image-forming coupler.

6. The process of claim 5, wherein the weight ratio of the sum of the primary permanent solvents to the sum of the solvents having a boiling point of at least 150°C, a molecular weight less than or equal to 300, and a solvatochromic parameter β value greater than or equal to 0.50 is at least 2.

7. The process of claim 5, wherein the weight ratio of the sum of the primary permanent solvents to the sum of the solvents having a boiling point of at least 150°C, a molecular weight less than or equal to 300, and a solvatochromic parameter β value greater than or equal to 0.50 is at least 3.

8. The process of claim 5, wherein the weight ratio of the sum of the primary permanent solvents to the sum of the solvents having a boiling point of at least 150°C, a molecular weight less than or equal to 300, and a solvatochromic parameter β value greater than or equal to 0.50 is at least 4.

9. The process of claim 5, wherein the weight ratio of the sum of the solvents having a boiling point of at least 150°C, a molecular weight less than or equal to 300, and a solvatochromic parameter β value greater than or equal to 0.50 to the photographically useful materials does not exceed 0.20.

10. The process of claim 5, wherein a primary solvent employed in the organic phase mixture of the dispersion is a phthalic acid alkyl ester, a phosphoric acid ester of molecular weight greater than 300, a citric acid ester, a benzoic acid ester, an aliphatic amide of molecular weight greater than 300, a mono or polyvalent alcohol of molecular weight greater than 300, or an aliphatic dioic acid alkyl ester.

11. The process of claim 5, wherein a primary solvent employed in the organic phase mixture of the dispersion is a phthalic acid alkyl ester, a phosphoric acid esters of molecular weight greater than 300, or an aliphatic dioic acid alkyl ester of the formula $R-(CH_2)_m-R'$ wherein R and R' each represent an alkoxy carbonyl group containing not more than 8 carbon atoms and m is an integer of from 1 to 10.

12. The process of claim 5, wherein the primary solvent comprises tricresylphosphate or dibutylsebacate.

13. The process of claim 5, wherein the weight ratio of dispersed coupler to primary solvents is from 0.1:1 to 10:1.

14. The process of claim 5, wherein the weight ratio of dispersed coupler to primary solvents is from 0.25:1 to 5:1.

15. The process of claim 5, wherein the weight ratio of dispersed coupler to primary solvents is from 0.25:1 to 2:1.

16. The process of claim 3, wherein R_1 through R_{17} each independently represent a substituted or unsubstituted alkyl or aryl group.

17. The process of claim 3, wherein:

in Formula I, R_1 is alkyl or aryl, R_2 is alkyl, and R_3 is alkyl or aryl, wherein the total number of carbon atoms contained in R_1 , R_2 , and R_3 is less than 20;

in Formula II, R_4 , R_5 and R_6 are alkyl or aryl, wherein the total number of carbon atoms contained in R_4 , R_5 , and R_6 is less than 15;

in Formula III, R_7 , R_8 and R_9 are alkyl groups, and the total number of carbon atoms contained in R_7 , R_8 and R_9 is less than 20;

in Formula IV, R_{10} and R_{11} are alkyl groups, wherein the total number of carbon atoms contained in R_{10} and R_{11} is less than 19;

in Formula V, R₁₂, R₁₃, R₁₄, and R₁₅ are alkyl or aryl, wherein the total number of carbon atoms contained in R₁₂, R₁₃, R₁₄, and R₁₅ is less than 20; and in Formula VI, R₁₆ and R₁₇ combine to form an aliphatic closed ring.

18. The process of claim 17, wherein the one or more organic solvents having a boiling point of at least 150°C, a molecular weight less than or equal to 300, and a solvatochromic parameter β value greater than or equal to 0.50 includes at least one compound of Formula I, where R₁ is a straight chain alkyl or aryl group, R₂ is a straight chain alkyl group, and R₃ is straight chain alkyl or aryl group, or R₁ combines with R₂ or R₃ to form a closed ring.

19. The process of claim 18, wherein the compound of Formula I is N,N-diethylbutyramide, N,N-diethyl-m-toluamide, N-butylacetanilide, or N-methylpyrrolidone.

20. The process of claim 17, wherein the one or more organic solvents having a boiling point of at least 150°C, a molecular weight less than or equal to 300, and a solvatochromic parameter β value greater than or equal to 0.50 includes at least one compound of Formula II, where R₄, R₅ and R₆ are alkyl groups.

21. The process of claim 20, where the compound of Formula II is trimethylphosphate or triethylphosphate.

22. The process of claim 17, wherein the one or more organic solvents having a boiling point of at least 150°C, a molecular weight less than or equal to 300, and a solvatochromic parameter β value greater than or equal to 0.50 includes at least one compound of Formula III.

23. The process of claim 22, wherein the compound of Formula III is trimethylphosphine oxide or triethylphosphine oxide.

24. The process of claim 17, wherein the one or more organic solvents having a boiling point of at least 150°C, a molecular weight less than or equal to 300, and a solvatochromic parameter β value greater than or equal to 0.50 includes at least one compound of Formula IV.

25. The process of claim 24, wherein the compound of Formula IV is dimethylsulfoxide or di-n-butylsulfoxide.

26. The process of claim 17, wherein the one or more organic solvents having a boiling point of at least 150°C, a molecular weight less than or equal to 300, and a solvatochromic parameter β value greater than or equal to 0.50 includes at least one compound of Formula V.

27. The process of claim 26, where the compound of Formula V is tetramethylurea or 1,3-dimethyl-1,3-diphenylurea.

28. The process of claim 17, wherein the one or more organic solvents having a boiling point of at least 150°C, a molecular weight less than or equal to 300, and a solvatochromic parameter β value greater than or equal to 0.50 includes at least one compound of Formula VI.

29. The process of claim 28, where the compound of Formula VI is cyclohexanone or cyclopentanone.

30. The process of claim 1, wherein the weight ratio of the sum of the solvents having a boiling point of at least 150°C, a molecular weight less than or equal to 300, and a solvatochromic parameter β value greater than or equal to 0.50 to the photographically useful materials does not exceed 0.20.

31. The process of claim 1, wherein the photographically useful material comprises a dye image-forming coupler.

32. The process of claim 1, wherein the liquid organic phase comprises one or more photographically useful materials and one or more organic solvents having a boiling point of at least 150°C, a molecular weight less than or equal to 250, and a solvatochromic parameter β value greater than or equal to 0.50, and wherein the weight ratio of the sum of the solvents having a boiling point of at least 150°C, a molecular weight less than or equal to 250, and a solvatochromic parameter β value greater than or equal to 0.50 to the photographically useful materials does not exceed 0.25.

33. The process of claim 1, wherein the liquid organic phase comprises one or more photographically useful materials and one or more organic solvents having a boiling point of at least 150°C, a molecular weight less than or equal to 300, and a solvatochromic parameter β value greater than or equal to 0.60, and wherein the weight ratio of the sum of the solvents having a boiling point of at least 150°C, a molecular weight less than or equal to 300, and a solvatochromic parameter β value greater than or equal to 0.60 to the photographically useful materials does not exceed 0.25.

34. The process of claim 1, wherein the liquid organic phase comprises one or more photographically useful materials and one or more organic solvents having a boiling point of at least 150°C, a molecular weight less than or equal to 300, and a solvatochromic parameter β value greater than or equal to 0.70, and wherein the weight ratio of the sum of the solvents having a boiling point of at least 150°C, a molecular weight less than or equal to 300, and a solvatochromic parameter β value greater than or equal to 0.70 to the photographically useful materials does not exceed 0.25.

35. A direct dispersion obtained by the process of claim 1.

36. A photographic element comprising one or more light sensitive silver halide emulsion imaging layers having associated therewith a direct

dispersion obtained by the process of claim 1, wherein the coated level of solvents having a boiling point of at least 150°C, a molecular weight less than or equal to 300, and a solvatochromic parameter β value greater than or equal to 0.50 in any layer of the element is no greater than 200 mg/m².